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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,148	03/17/2004	Anton Rodi	AR-R16	6401

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EXAMINER

MONBLEAU, DAVIENNE N

ART UNIT PAPER NUMBER

2878

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,148

Applicant(s)

RODI, ANTON

Examiner

Davienne Monbleau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 17-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/17/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Response to Amendment

The preliminary amendment filed on 4/15/04 has been entered. Claims 1-16 were canceled. Claims 17-32 were added.

The preliminary amendment filed on 5/25/04 has been entered. Claim 30 has been amended. Claims 17-32 are pending.

Specification

Examiner suggests incorporating sub-headings in the specification to distinguish the various sections (i.e. Brief Summary of Invention, Brief Description of Drawings.)

Information Disclosure Statement

The IDS filed on 3/17/04 has been acknowledged and a signed copy of the PTO-1449 is attached herein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 18, 22, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al. (U.S. 5,323,309).

Regarding Claim 17, *Taylor* discloses in Figures 1 and 2 an absolute measuring system comprising a main voltage supply (column 4 lines 30-32), an encoder (112) receiving during normal operation a voltage supply from said main voltage supply, said encoder (112) being

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switched to an auxiliary mode and receiving an auxiliary voltage and uses less energy when said main voltage supply fails, said encoder only determining a coarse determination of a measured value made during the auxiliary mode of operation, and a chargeable memory (223, 225, 232) connected to said encoder for providing the auxiliary voltage. (See also column 4 lines 44-55; column 5 lines 30-40; column 7 lines 6-32.) (Note that the resolver is functioning as an incremental encoder.)

Regarding Claim 18, *Taylor* discloses in Figure 2 that said chargeable memory (223, 225, 232) comprises a battery (223).

Regarding Claim 22, *Taylor* discloses in Figure 1 that the chargeable memory (223, 225, 232) is disposed at least in a vicinity of said encoder (112).

Regarding Claim 29, *Taylor* discloses in Figure 2 an external auxiliary power supply (222) and cables connecting said external auxiliary power supply (222) and said main voltage supply (column 4 lines 30-32) to said chargeable memory (223, 225, 232), said chargeable memory (223, 225, 232) being charged by at least one of said main voltage supply and said external auxiliary power supply. It is inherent that the components are connected via some kind of power cables.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-21, 23-28, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor.

Regarding Claims 19-21, *Taylor* teaches in Figure 2 a chargeable memory (223, 225, 232) that comprises a battery (223) but does not teach that the memory is a condenser or various combinations of a battery and/or a condenser. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to use a particular type of chargeable memory device in *Taylor* for its compatibility with and optimization of the encoder system.

Regarding Claims 23 and 24, *Taylor* teaches in Figure 1 that the chargeable memory (223, 225, 232) is disposed in a vicinity of the encoder (112) but does not teach that it disposed in or on said encoder. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to place the chargeable memory in a particular location relative to the encoder based on the configuration of the overall system, which would include such considerations as space confinement and amount of connecting cable.

Regarding Claims 25-28, *Taylor* teaches in Figure 2 that the memory (223, 225, 232) is chargeable (225) but does not teach that the memory (223, 225, 232) is chargeable via a plurality of different means. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to use a particular type of memory with the associated charging means (such as solar cells, EM waves, transformer coupling, or motion induced field induction) as they are all acceptable battery means for charging the encoder device. Choosing a particular memory device over another is based on desired characteristics and the overall configuration of the system.

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Regarding Claim 30, it is inherent that *Taylor* teaches cables to electrically connect the various components, but he does not teach fiber optic cables since the encoder is a resolver. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to use fiber optic cables at least on a side close to the encoder if using an optical encoder to efficiently couple the incident light to the electrical components. Resolvers and incremental encoders are interchangeable as they both detect the angular position of a rotating object.

Regarding Claim 31, *Taylor* teaches in Figures 1 and 2 an angular position transducer (112) and a system controller (116) but does not teach that it uses radio waves for communication. It would have been obvious, however, to one of ordinary skill in the art at the time of the invention to use a transmitter/receiver and radio communications in *Taylor* to remotely control the device.

Regarding Claim 32, it would have been obvious to one of ordinary skill in the art at the time of the invention to reduce radio transmissions during battery operation when the voltage supply fails in order to conserve the battery power for operation of the encoder (112).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because they teach various encoder configurations with a power supply and battery back up source.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 571-272-1945. The examiner can normally be reached on Mon-Fri 9:00 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darienne Menleben

DNM


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